REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 17-21 are presently active in this application, Claims 1-16 having been canceled and Claims 17-21 added by the present Amendment.

In the outstanding Office Action, the specification and Claims 5 and 13 were objected to rejected under 35 USC §112, first paragraph, as failing to provide an adequate written description; Claims 1-4 and 9-12 were rejected under 35 USC §102(a,e) as being anticipated by Jensen et al (6,175,614)and Claims 5-8 and 13-16 were rejected under 35 USC §103(a) as being unpatentable over Jensen et al.

In response to the rejection under 35 USC §112, first paragraph, it is noted that this ground for rejection is believed to be moot in view of the cancellation of original Claims 1-17. In the new Claims 17-21, Applicants have clarified the difference in structure between "fluoroscopy" and "imaging." The newly submitted Claims are consistent with the description at page 20, lines 10-13 of the specification, for example, in regard to the difference between "fluoroscopy" and "imaging" and the outstanding rejection is not believed applicable to new Claims 17-21.

Applicants respectfully traverse the outstanding grounds for rejection based on the applied Jensen patent, because in Applicants' view the newly submitted claims clearly patentably define over Jensen.

In particular, the diagnostic X-ray system according to claim 17 of the present application performs a first X-ray radiation in a fluoroscopy mode to determine an imaging position, and a second X-ray radiation in an imaging mode to acquire a diagnosis image. Further, the system sets a specific region for each of the fluoroscopy-mode and the imaging-

mode, and determines the X-ray loading factors based on the respective specific regions and performs feedback control, as is evident from the following features recited in Claim 17:

> ...
> **a region set unit that sets a first region in the image in the case of moving to the fluoroscopy mode, and sets a second region broader than the first region in the image in the case of moving to the imaging mode;**
> a region transform unit that transforms the first region to exclude the radiation region corresponding to the beam limiting when the first region includes the region corresponding to the beam limiting, and transforms the second region to exclude the region corresponding to the beam limiting when the second region includes the region corresponding to the beam limiting;
> a brightness computing unit that computes a brightness value within the transformed first region or within the transformed second region when the first region or the second region is transformed by the region transform unit, and computes a brightness value within the first region or within the second region set by the region set unit when the first region or the second region is not transformed by the region transform unit; and
> **a controller that determines the X-ray loading factor related to the first X-ray radiation or the second X-ray radiation on the basis of the brightness value, and performs feedback control of the X-ray generating unit on the basis of the X-ray loading factor.**

It is respectfully submitted that Jensen does not disclose these constituent elements, and thus the invention recited in Claim 17 is clearly not anticipated by Jensen.

Furthermore, new Claim 17 is not believed to be obvious over Jensen, for the following reason.

Specifically, the diagnostic X-ray system recited in new Claim 17 performs image acquisition in a fluoroscopy mode to determine an imaging position (first X-ray radiation), and image acquisition in an imaging mode to acquire a diagnosis image (second X-ray radiation). Further, the diagnostic X-ray system of Claim 17 sets a specific region for each of the fluoroscopy-mode and the imaging-mode, and determines the X-ray loading factors based on the respective specific regions and performs feedback control. Jensen does not suggest at all applying ABC (Auto Brightness Control) in such a plurality of operation modes. Further, by the above structure, the claimed invention achieves an advantageous effect, not evident

from the cited prior art, of acquiring a suitable X-ray diagnosis image in each of the operation modes having entirely different X-ray loading factors.

Further, the X-ray diagnostic system recited in new Claim 18 sets a second region corresponding to the imaging mode when performing a first X-ray radiation corresponding to the fluoroscopy mode, and determines an X-ray factor using the second region and performs a feedback control. As recited in Claim 18, performing the first X-ray radiation with the second region set enables several advantageous effects. First, it is possible to perform a suitable brightness value computation also in the imaging mode in which a second region larger than the first region is set. Secondly, it is possible to determine a proper X-ray loading factor related to the second X-ray radiation, using the suitably computed brightness value. Thirdly, in the imaging mode, it is possible to determine the X-ray factor related to the second X-ray radiation only by performing the first X-ray radiation having a relatively low intensity, and reduce exposure of the subject to radiation. Jensen clearly does not suggest these effects, and the technique disclosed by Jensen cannot achieve these effects. Therefore, it is respectfully submitted that Applicants' claimed invention is clearly not rendered obvious over Jensen.

Consequently, in view of the present amendment and in light of the above comments, no further issues are believed to be outstanding, and it is respectfully submitted that Claims

17-21 are in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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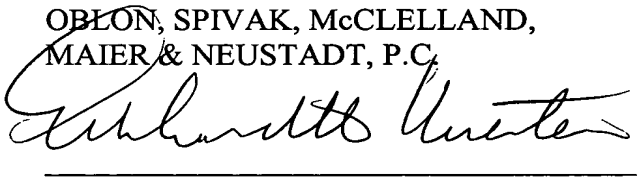

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